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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,016	12/15/2003	Eiji Ogata	JP920030014US2	4165
53493	7590	08/27/2007		
LENOVO (US) IP Law 1009 Think Place Building One, 4th Floor 4B6 Morrisville, NC 27560			EXAMINER LOUIE, OSCAR A	
			ART UNIT 2136	PAPER NUMBER
			MAIL DATE 08/27/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

ED

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/736,016	OGATA, EIJI	
	<b>Examiner</b>	<b>Art Unit</b>	
	Oscar A. Louie	2136	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 December 2003.  
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 1-21 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.  
 10) ☒ The drawing(s) filed on 15 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☒ All b) ☐ Some \* c) ☐ None of:  
 1. ☒ Certified copies of the priority documents have been received.  
 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
 \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/03</u>   | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

This first non-final action is in response to the original filing of 12/15/2003. Claims 1-21 are pending and have been considered as follows.

#### ***Examiner's Note***

1. The Applicant appears to be attempting to invoke 35 U.S.C. 112 6<sup>th</sup> paragraph in Claims 1, 8, & 15 by using "means-plus-function" language. However, the Examiner notes that the only "means" for performing these cited functions in the specification appears to be computer program modules. While the claims pass the first test of the three-prong test used to determine invocation of paragraph 6, since no other specific structural limitations are disclosed in the specification, the claims do not meet the other tests of the three-prong test. Therefore, 35 U.S.C. 112 6<sup>th</sup> paragraph has not been invoked when considering these claims below.

#### ***Drawings***

2. The drawings are objected to because Figures 1 & 6-8 all illustrate box 15 and an elliptical box above box 15 with shading which makes it difficult to read the labeled text within each box. Although the disclosure clarifies these two boxes to some degree, it would be appreciated by one of ordinary skill in the art to be able to understand all the figures in clarity. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should

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include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Specification*

3. The abstract of the disclosure is objected to because line 3 recites "security hardware replaced" which should read as "...security hardware which is replaced..." and line 4 recites "status generated" which should read as "...status which is generated..." for the purposes of grammatical clarity. Correction is required. See MPEP § 608.01(b).
4. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Paragraph 0002 lines 2-3 recites a hyperlink. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

*Claim Rejections - 35 USC § 101*

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 8 & 15 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

- Claim 8 recites “a service enabling the control of an information processing apparatus” without including recitation that the “service,” which is a computer program, is stored on a computer readable storage medium. Thus, Claim 8 is non-statutory as in accordance with 35 U.S.C. 101.
- Claim 15 recites “a computer program for controlling an information processing apparatus.” However, the applicant does not include that the computer program is stored on a computer readable storage medium. Therefore, Claim 15 is non-statutory as in accordance with 35 U.S.C. 101.

*Claim Rejections - 35 USC § 102*

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 4, 6-11, 13-18, 20, & 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Heptig et al. (US-5377269-A).

Claims 1, 8, & 15:

Heptig et al. disclose a method, service, and computer program for controlling an information processing apparatus comprising,

- “security hardware for storing security key information so that it can be freely read and written” (i.e. “electronic key”) [column 12 line 5];
- “OS start admission means for determining whether or not input data for user certification is valid when an OS starts based on said security key information read from said security hardware” (i.e. “In step 930, the key 14 data is compared to the data in an authorized electronic key data file stored in the memory 31, and a determination is made whether the key 14 is authorized”) [column 12 lines 14-17];
- “admitting the OS to start if the determination result is positive” (i.e. “In step 940, the FIRMLOC.EXE program exits to the operating system”) [column 12 lines 52-54];

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- “security key information restoration means for restoring the security key information in the security hardware based on predetermined data for restoration” (i.e. “Add User to System 1314 or Delete User from System 1316 enables the system administrator to add or delete user keys from the system, thereby controlling the designation of identity of the users who are authorized to access the computer system”) [column 16 lines 28-32];
- “OS start type selection means for selecting and executing either a first type OS start for generating a system status in which said security key information restoration means is operable (hereafter, referred to as a "first system status") and operating said OS start admission means” (i.e. “If in step 1240 an authorized key 14 was detected on the parallel printer port 50, execution proceeds to step 1244 where the key 14 data and the system time are recorded as an "authorized access"”) [column 15 lines 60-63];
- “OS start type selection means for selecting and executing either a functionally restricted second type OS start for generating a functionally restricted system status in which said security key information restoration means is inoperable (hereafter, referred to as a "second system status") and not operating said OS start admission means” (i.e. “If in step 1224 it is determined that the electronic key 14 present on the parallel printer port 50 is not an authorized key 14, or if there is no key 14 detected on parallel printer port 50, execution proceeds to step 1228”) [column 15 lines 16-19];

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- “said method causing a computer to execute: a cancellation step in which cancellation means cancels the operation of said OS start admission means as to the first type OS start after it is generated” (i.e. “The interrupt 2fh routine is called during initial boot-up in step 220 of FIG. 2 during execution of the device driver routine (LOCKIT.SYS) to disable the keyboard 35 and also in step 938 of FIG. 9b during execution of the 10ad access prevention routine (FIRMLOC.EXE) to save or retrieve the port 50 address, IRQ mask byte and number of keys”) [column 13 lines 43-49];
- “said method causing a computer to execute: a cancel release step in which cancel release means releases the cancellation of the operation of said OS start admission means by said cancellation means after the first type OS start having the operation of said OS start admission means canceled by said cancellation means is executed at least once” (i.e. “In step 1024, if an authorized key 14 detected, execution proceeds to step 1026; otherwise, execution loops back to step 1024 until an authorized key 14 is detected and execution proceeds to step 1026”) [column 13 lines 21-25].

Claims 2, 9, &amp; 16:

Heptig et al. disclose a method, service, and computer program for controlling an information processing apparatus, as in Claims 1, 8, & 15 above respectively, further comprising,

- “the input data for user certification is the data keyed in by the user on the first type OS start” (i.e. “After the present invention is installed on the PC 10, it will be necessary for a user to insert an electronic key 14 into the jack 16 to access the system”) [column 17 lines 57-59].

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Claims 3, 10, & 17:

Heptig et al. disclose a method, service, and computer program for controlling an information processing apparatus, as in Claims 1, 8, & 15 above respectively, further comprising,

- “said data for restoration is generated on generating the security key information in the security hardware so as to render the security key information freely restorable and is stored in an auxiliary storage” (i.e. “Add User to System 1314 or Delete User from System 1316 enables the system administrator to add or delete user keys from the system, thereby controlling the designation of identity of the users who are authorized to access the computer system”) [column 16 lines 28-32].

Claims 4, 11, & 18:

Heptig et al. disclose a method, service, and computer program for controlling an information processing apparatus, as in Claims 1, 8, & 15 above respectively, further comprising,

- “the first and second type OS starts are the starts based on the same OS stored in the same auxiliary storage” (i.e. “In the present embodiment, the PC 10 is an IBM-compatible computer using either MS-DOS or PC-DOS as its disk operating system stored in the system memory 31”) [column 5 lines 55-58];
- “when starting the OS, said OS start type selection means detects whether or not a predetermined user operation is performed so as to select and execute the first type OS start in the case of "no" and the second type OS start in the case of "yes" respectively” (i.e. “it is determined whether the electronic key 14 present on the parallel printer port 50

is an authorized key 14. If it is an authorized key 14, execution proceeds to step 1226...If in step 1224 it is determined that the electronic key 14 present on the parallel printer port 50 is not an authorized key 14, or if there is no key 14 detected on parallel printer port 50, execution proceeds to step 1228”) [column 15 lines 10-13 & lines 16-19].

Claims 6, 13, & 20:

Heptig et al. disclose a method, service, and computer program for controlling an information processing apparatus, as in Claims 1, 8, & 15 above respectively, further comprising,

- “there is an erasure step of having said cancel release means erased by erasure means after said cancel release means releases the cancellation of the operation of said OS start admission means by said cancellation means” (i.e. “Once the security system recognizes an authorized electronic key 14, PC 10 operation resumes from the point at which it was previously suspended. This feature is referred to as "auto-suspend." The key 14 may be removed and reinserted successively in order to suspend operation without loss of data and without requiring rebooting of the PC 10”) [column 18 lines 55-62].

Claims 7, 14, & 21:

Heptig et al. disclose a method, service, and computer program for controlling an information processing apparatus, as in Claims 1, 8, & 15 above respectively, further comprising,

- “there is a step of having said erasure means generated by said cancel release means” (i.e. “Once the security system recognizes an authorized electronic key 14, PC 10 operation resumes from the point at which it was previously suspended. This feature is referred to

as "auto-suspend." The key 14 may be removed and reinserted successively in order to suspend operation without loss of data and without requiring rebooting of the PC 10") [column 18 lines 55-62].

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 5, 12, & 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heptig et al. (US-5377269-A).

Claims 5, 12, & 19:

Heptig et al. disclose a method, service, and computer program for controlling an information processing apparatus, as in Claims 1, 8, & 15 above respectively, but do not explicitly disclose,

- "the first and second type OS starts are the starts based on the OSes stored in different auxiliary storage respectively"
- "when said second OS is readable from the auxiliary storage storing said second OS, said OS start type selection means selects and executes the second type OS start in preference to the first type OS start"

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but, Heptig et al. do disclose,

- “In step 212, the PC 10 reads the floppy disk to determine whether it is a valid boot-up disk. A valid boot-up disk is defined as a floppy disk containing the required operating system files to install an operating system in the PC's 10 memory. If in step 212 it is determined that the floppy disk is a valid boot-up disk, then execution normally proceeds to step 214. In step 214 the PC 10 boots-up from the floppy disk drive 16” [column 6 lines 38-45];
- “If in step 1224 it is determined that the electronic key 14 present on the parallel printer port 50 is not an authorized key 14, or if there is no key 14 detected on parallel printer port 50, execution proceeds to step 1228” [column 15 lines 16-19];

Therefore, it would have been obvious for one of ordinary skill in the art at the time of the applicant's invention to include, “the first and second type OS starts are the starts based on the OSes stored in different auxiliary storage respectively” and “when said second OS is readable from the auxiliary storage storing said second OS, said OS start type selection means selects and executes the second type OS start in preference to the first type OS start,” in the invention as disclosed by Heptig et al. since a floppy disk may be used to boot it is implied that booting from the floppy may invoke one of the first and second type OS starts. In addition, the first type OS start may be an authorized access startup where as the second type OS start may be an unauthorized access startup.

*Conclusion*


11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Oscar Louie whose telephone number is 571-270-1684. The examiner can normally be reached Monday through Thursday from 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser Moazzami, can be reached at 571-272-4195. The fax phone number for Formal or Official faxes to Technology Center 2100 is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

OAL  
08/23/2007

Nasser Moazzami  
Supervisory Patent Examiner

  
8,23,07